

Amendments to the Claims

Please amend the claims according to the following listing of the claims.

Listing of the claims

1. (previously presented) A centrifuge comprising:
 - a rotatably mounted bowl and, concentrically rotatably mounted therein, a scroll capable of rotating at a differential speed relative to the bowl, a member of the group consisting of the bowl and the scroll being powered by a central exterior (stationary located) motor assembly,
 - a hydraulic motor, comprising a motor casing and a motor rotor provided as a gearbox for controllably defining said differential speed, being interposed between the bowl and scroll with the motor casing functionally connected to one of the bowl and the scroll and the motor rotor functionally connected to the other of the bowl and the scroll,
 - a hydraulic feed pump for feeding the hydraulic motor, wherein said hydraulic motor is engaged corotatingly with said hydraulic feed pump, and said hydraulic feed pump includes a rotor shaft supported in a non-corotating manner exterior to at least one rotating centrifuge part, and
 - adjusting members for changing flow supplied by said feed pump to said hydraulic motor, the adjusting members hydraulically actuatable and arranged to corotate with said hydraulic motor.
2. (currently amended) The centrifuge as set forth in claim 1, wherein the feed pump has a constant displacement volume, wherein said adjusting member is a flow control valve which returns the feed flow not required by said hydraulic motor to a non-pressurized area of a flow circuit connecting the hydraulic motor and the hydraulic pump, said flow control valve setting either the flow branched off from the working flow circuit

via 2-way flow control or directly regulating the flow delivered to said hydraulic motor via 3-way flow control.

3. (previously presented) The centrifuge as set forth in claim 2, wherein a control aperture of said flow control valve through which said regulated flow flows can be located on both the rotating system and on the non-rotating system.
4. (previously presented) The centrifuge as set forth in claim 2, wherein a control aperture through which said regulated flow flows is controlled by application of return pressure or activated by a proportional magnet or solenoid.
5. (previously presented) The centrifuge as set forth in claim 1, wherein the feed pump has a variable displacement volume, wherein said adjusting member is a hydraulically actuated cylinder which is activated via a servo member.
6. (previously presented) The centrifuge as set forth in claim 5, wherein said servo member is activated directly via a proportional magnet or solenoid.
7. (previously presented) The centrifuge as set forth in claim 5, wherein said servo member is activated directly or indirectly via the charging pressure of a charging pump.
8. (currently amended) The centrifuge as set forth in claim 1, further comprising a cooling means and/or a filter means, wherein ~~said elements serving to condition said drive fluid~~ the cooling means and the filter means are located exterior to said rotating system.
9. (currently amended) The centrifuge as set forth in claim ~~5~~ 7, wherein said charging pump like said feed pump is arranged corotating.

10. (previously presented) The centrifuge as set forth in claim 1, wherein the feed pump has a variable displacement volume, wherein said adjusting member is a hydraulically actuated cylinder which is activated via a valve.
11. (currently amended) The centrifuge as set forth in claim 1, wherein the hydraulic motor casing is functionally connected to the bowl and the motor rotor is functionally connected to the scroll, wherein the hydraulic motor powers the bowl.